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The Macdonald FARM Journal

JUN 1 8 1963



JUNE 1963

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Overweight
Budgets
Cottons
Dairy Herds
Beef Cattle





THE MACDONALD LASSIE

The Cattle Outlook

The outlook for cattle and calves, particularly finished beef cattle is less favourable than a year ago. The Canadian beef price situation, however, has not been in as difficult a spot as prices for beef south of the border. Canadian cattle producers still have a seven and a half per cent dollar devaluation in their favour on the export market. Also the strong American market in recent years has drained cattle out of Canada into the United States. Thus where United States cattle numbers increased four per cent last year, our own herds increased only one per cent. Thus Canadian beef prices have tended to hold relatively steady, the weakest part of the picture this winter and spring has been finished cattle. The outlook for feeder cattle this fall will not be as favourable as a year ago. In part due to the fact that many feeders were badly hurt in the 1962-63 season. The feeder cattle producer can expect considerably reduced prices this fall; however, the buyer and feeder of such cattle should obtain a reasonable margin on these animals in the 1963-64 feeding period. At this juncture when others are reacting against planning to put feeders in the feed lot this fall, the best reaction appears to be that of buying feeders at what we project will be substantially reduced prices. Plan as usual to minimize the cost of gain consistent with obtaining economical gains. The feed price prospects appear favourable, if the weather is normal, feed supplies will be large, augmented by the increasing expansion of grain cow acreage.

The eastern canner and cutter market has considerably strengthened with the coming of grass, and is certainly likely to remain strong until supplies of western beef begin to trickle through to the eastern Canadian market. These same supplies, of course, are augmented by cull cows and calves from eastern dairy herds that have been handled to utilize forage supplies in the east.

One caution might be observed and that is with respect to droughty situations arising over a substantial area either in the east or the west. Such a condition could bring an untimely number of cattle to the market in the form of cull cows and other stock that could depress the market in an unseasonable fashion.

WHY THE STATISTICS

Some months ago the Macdonald Farm Journal began publishing a series of historical and current statistics relating to the Canadian economy and particularly to the agriculture of this region. Why? It was hoped that farm and other readers would by the publication of these statistics be given access to some of the major facts that reveal current conditions in agriculture, and in the Canadian economy on which agriculture so strongly depends. It was also hoped that by keeping the monthly Journals readers could turn back over the months and observe for themselves what is happening to costs, prices, incomes. So save your Journals!

The five series of data which follow deal with prices, costs, and incomes and are focused so far as possible on the Province of Quebec. These data strikingly portray the cost — price squeeze; and they show that net incomes of Quebec farmers are currently running at lower levels than in the early post-war years.

Almost all of the statistical series published above are derived from the Dominion Bureau of Statistics, and particularly from the Agricultural Branch of the Bureau. We hope as readers reflect on these statistics that they will realize how much the farm industry owes to the handful of workers in the Dominion Bureau of Statistics who compile and publish these materials. Without adequate statistics of the farm industry there could be no real knowledge of what the farm problem is. Canada is very fortunate in its core of agricultural statisticians and in the co-operation given to them by farmers, marketing agencies and processing industries.

We hope our readers appreciate this service and that they will write to commend or criticize the Journal for this effort.

COLLEGE NEWS

Convocation Day for Macdonald College graduates in Agriculture and Home Economics was Friday, May 31st. Graduation exercises for the Institute of Education were held on Monday, June 3rd.

A bilingual seminar on the United Nations for High School students will be held at Macdonald College during the last week of August. Sponsored by the United Nations Association in Canada, the 120 English and French students will discuss the role of the United Nations in world affairs and the part Canada plays in the world organization. Some lectures will be delivered in French and some in English. Discussions will be bilingual. Simultaneously translation will not be used.

Dr. C. B. Haver of the Department of Agricultural Economics participated in a meeting of the Canadian Agricultural Economics Society held in Ridgetown on May 27th. He discussed ways and means of agricultural adjustment in Canada. **Dr. M. A.** MacDonald of the Department of Animal Science addressed the Canadian Society of Animal Production meeting the same week in Ridgetown.

Better Farming Day is slated for Macdonald College on Friday, July 5th. Plan now to attend. An interesting program is being arranged.

A new Bookmobile for the MacLennan Travelling Library at Macdonald College has been ordered for delivery in September. The new van will hold 3,000 books, twice as many as the older bookmobile. Beginning in September, there will be two bookmobiles travelling throughout Southern Quebec.

Professor Bob Broughton of the Department of Agricultural Engineering is giving a series of lectures in water conservation and management at the Brace Research Institute in Barbados.

TOUR TO EUROPE

Mr. T. G. Sevigny, Agricultural Development Officer for the C. N. R. is organizing a Canadian Agricultural Business Tour to Europe for September, 1963. The tour will include visits to farms and farm businesses in the United Kingdom, the Netherlands, Germany, Italy, Switzerland and France. The departure is from Montreal on September 6th, 1963 at 11 A. M. via "R. M. S. Franconia" and return is via Le Havre, France, on October 9th. Cost for the tour including round trip ocean fares is \$1,058.00. Details are available from Mr. T. G. Sevigny, Box 8100, C. N. R., Montreal, P.Q.

INSIDE ... W. G. MacDougall Retires

"Better farming — better business — better living." This is the aim of the extension worker.

No one has made more effort to live up to these ideals than Mr. W. G. Mac-Dougall, a recently retired agronome of the Quebec Department of Agriculture. From Pontiac to Compton, from Huntingdon to Gaspé, Mr. MacDougall has been closer to the changes in Quebec Agriculture during the past fifty years than most agriculturalists.

Mr. MacDougall is a 1914 graduate of Macdonald College. Prior to college, he lived on the family farm near Ormstown. Upon graduation, he was appointed Assistant Demonstrator for Macdonald College at Cowansville. In 1916, he transferred

to the Quebec Department of Agriculture as agronome.

During the past half-century, Mr. MacDougall has had something to do with practically every agricultural project in the Eastern Townships. In 1921, he organized the first calf club, later to become a 4-H Club. He travelled with a horse and buggy to attend school fairs, meetings and short courses. Later, in the automobile age, he organized some of Quebec's first farm forums. He was president of the Eastern Townships Agricultural Association in 1952 and 1953 and was a director of the E.T.A.A. since 1928.

There are few young farm boys in the Eastern Townships who have not profited from "Mac's" few words of advice. He's remembered as the man who lead the livestock parade at Sherbrooke Fair; his cane swinging in time to the band music. He's remembered for his ability to remember the names of every farmer with whom he came in contact. He's remembered for his ability to speak in French at all the meetings, banquets and gatherings.

Now, half a century after his graduation from Macdonald College, Mr. Mac-Dougall is retiring. The results of his efforts are visible everywhere in the Eastern

Townships. He did much more than was required of his position.

Macdonald College is proud of the achievements of its graduates. "Mac" Mac-Dougall will always be thought of as not only one of our first graduates but one who applied the principles of extension — better farming, better business, better living — for the improvement of Quebec agriculture.

4-H: 72,000 Members

"I pledge —

- · My Head to clearer thinking,
- My Heart to greater loyalty,
- My Hands to larger service,
- · My Health to better living,

for my club, my community and my country."

This year, 4-H Clubs in every Canadian province are observing their 50th anniversary. In May, a cairn was unveilled at Roland, Manitoba; the site of the first boys' and girls' club to commemorate the occasion.

It was this first 4-H Club in Canada that began as a result of the interests of Sir William Macdonald. The story has been recounted about how Dr. James Robertson, Federal Commission of Agriculture and Dairying at the turn of the century, saw a need for rapid production of improved quality seed to furnish homesteaders as they began prairie farming. He asked Sir William Macdonald for assistance. Sir William gave \$10,000 ("a reasonable and modest request for one Scotsman to make of another.") This resulted in the Robertson-Macdonald Seed competition involving 450 young farm people.

And so the founder of Macdonald College was also involved in the beginning

of boys' and girls' 4-H Club work in Canada.

Today, Macdonald College is still extremely interested in 4-H Club activities. Many of our students have completed several 4-H projects. Many of our graduates, farmers and extension workers, are leaders of 4-H Clubs. Many clubs visit the College each year as participants in competitions, as part of their projects, as visitors and as friends. We always welcome their visits.

Now, as 4-H Clubs in Canada begin their second half century of achievement, let not the smugness of success mar their ability to keep pace with the changes in agriculture. We wish them good fortune.

MARK WALDRON

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CHEESE -

An Important Food

by Helen R. Neilson

Cheese making has become an important Canadian industry



Cheddar cheeses of various textures and tastes are blended to produce the desired result of process cheese.

Milk from domesticated animals has been a source of food for man from earliest time. One of the most important advances in food production was the discovery that milk could be changed into a solid which would keep well and was easy to carry. We can only conjecture that an early herdsman used a calf's stomach as a pouch to carry milk. As he journied on a warm day, the rennin in the lining of the stomach caused the milk to curdle and formed a simple cheese. As one of the earliest foods processed by man, cheese has been important both nutritionally and economically throughout history.

The Greeks, and later the Romans, used cheese as an important staple food. Greek athletes were fed it to increase their endurance and athletic prowess. The Old Testament contains several references to the use of cheese. The first reference to its use in Britain is found in records of the Roman Army where it formed part of the soldiers' diet.

Until the middle of the nineteenth century, cheese-making was mainly a home or cottage industry. The farm housewife was usually the cheesemaker for the family supply. However, special cheeses were developed in certain locales using an exact formula which was handed down from one generation of expert cheesemakers to another. Examples of such cheese are Roquefort, Camembert, Guoda, Parmesan and many others.

Early emigrants from Europe carried cheese with them for food during the voyage and brought the recipes and knowledge of cheesemaking with them to the new world. where they continued to make cheese in the traditional manner on their pioneer farms. By 1864 the first cheese factory was opened in Ontario, and was soon followed by

others there and in Quebec. This cheese found a ready market in England and by the turn of the century over 200 million pounds were being exported annually. Although cheesemaking is now a commercial industry, there is still some cheese made on farms and sold locally, particularly in Quebec where curds are offered for sale at roadside stands.

Although cheese making has become an important Canadian industry, with the total production of cheese as cited in the Canada Year Book for 1961 of 130,370,000 lbs., the average Canadian is not a cheese eater. The per capita consumption in European countries is often double that of Canada. Recently there has been an increase in the amount of cheese consumed domestically, but this may be due to the post war influx of Europeans rather than a change in the food habits of indigenous Canadians.

Canada is known abroad for the excellence of its cheddar cheese and in the past was concerned more with the production of cheese for the export market than for home use. Most of the cheese produced is of the cheddar type, commonly known as "rat-trap" cheese. This cheese was first made in Cheddar, England. Today the title applies to the process followed in the manufacture of the cheese which produces a pale coloured cheese with a flaky texture and firm body. It is now sold in many styles, shapes and sizes, but originally it was a large round cheese, averaging seventy pounds in weight.

Cheddar cheese is classified as a natural cheese and the simple steps in making cheese of this type are essentially as follows: Cow's milk is acidified by the action of lactic acid bacteria (the bacteria which causes the souring of

milk). This is done by adding a lactic acid starter in commercial cheese making, or by allowing the milk to sour in the home production of cheese. The casein is then coagulated or curdled by rennet, which is an enzyme extracted from the lining of the calf's stomach and is prepared commercially. It causes the mass to coagulated to a jellylike consistency. It is then left to stand for a short time during which the curd separates from the whey, the latter being essentially water and milk-sugar together with a little fat and whatever other ingredients have escaped from being imprisoned in the curd. The curd is then cut and stirred. The temperature is raised slowly with continuously stirring to a 100°F or higher. The curd becomes firm, the whey is removed and the curd salted, pressed and then wrapped. The rind is developed by pressing very firmly and curing the cheese at between 50 - 60°F. After 5 - 6 days the cheese is waxed. Further curing to develop flavour and body continues for six weeks to five months, or longer. Canadian regulations concerning cheese contained in the Food and Drugs Act and Regulations require that cheese be ripened or "stored" for a minimum of sixty days or more before being placed on the market for sale.

In addition to Cheddar Cheese, Canada produces and consumes large quantities of processed cheese. This is a blend of fresh and aged natural cheeses which have been shredded and mixed. An emulsifier is then added and the mixture is heated (pasteurized) after which no further ripening occurs. The resulting product is a blend of flavours, depending on the cheeses used or the flavouring added. It melts readily when heated, slices easily and the thinner mixtures can be spread. It is packaged in

many forms and other ingredients have been added which early cheesemakers would never imagined, such as onions, chives, dates and even cooked meats.

Connoiseurs of cheese know and appreciate the great variety of natural "fancy" cheeses made by special processes both in Canada and abroad. An example is Oka cheese. This is a famous cheese made by the Trappist Monks at Oka, Quebec. It has a mild flavour, is a flat, round cheese with a firm, tough rind and a soft homogeneous interior. A similar cheese is made by the Order in France and is known as "Port du Salut". Formerly the famous "fancy" cheeses, of which there are many hundreds, were imported. Now many of these cheeses are made by Canadian cheesemakers. The distinctive flavour. body and texture characteristic of the various cheeses are due to: 1) the kind of milk used, for example, cows', sheep, goats', buffalo and camels'; 2) the method used for curdling the milk, cutting, cooling and forming the curd; 3) the type of bacteria or mould used in ripening; 4) the amount of salt or other seasonings added; 5) the conditions of ripening, such as, temperature, humidity and length of time. Sometimes only minor differences in the procedures followed may make the difference between one variety of cheese and another.

Another example of a special cheese is Roquefort, a favourite of many Canadians. It is named after a French village where great herds of sheep are pastured on an immense plain and yield



In the grinding room raw cheddar cheese is stripped of its outer covering and ground before being blended.



After cooking and pasteurization, process cheese is packaged automatically.

a milk which is used in the production of the cheese. The mould is introduced by means of special bread which is put away in a damp place until it is covered with mould, the blue-green "penicillium glaucum". When it is ripe enough the new cheeses made from the sheep's milk are thoroughly rubbed in the mouldy bread and layers of it are put between the curd in order that they may absorb still more of the mould. Finally, after several days pressing, the cheeses are wrapped in linen and dried. They are then taken by the dairymen to the village and sold to the owners of vaults or caves, which are natural clefts or excavations in the limestone rocks near the town. The cheeses are piled up and salted in these caves, being frequently rehandled and rubbed to make sure the salt is thoroughly impregnated in them. They are next scraped and pricked with long needless so that the mould may run entirely through them, thus producing the distinctive mottled appearance of Roquefort. The true Roquefort is a cheese made from sheep's milk only, but recently goat's milk and cow's milk have been used for the production of a type of Roquefort cheese.

Nutritionally cheese provides an excellent source of protein and, most important, a source of calcium and riboflavin (Vitamin B2). Apart from milk, the availability of calcium in the diet is usually low. This is equally true of riboflavin. Therefore, cheese is particularly important as a dietary source of these nutrients for people who do not drink milk. It is a highly concentrated food, since it requires 100 lbs. of milk to produce 8 to 13 pounds of cheese. Cheese is also high in fat and 1 ounce of cheese provides approximately 100 calories. The usual content of cheddar cheese is approximately 30 per cent. However, skim milk cheese is now available on the market in various forms and contains as little as 7 per cent fat, and provides approximately 58 calories per ounce. Skim milk cheese is also an excellent source of both calcium and riboflavin.

Recently Canadians have been using cheese in a greater variety of ways than formerly. It can be incorporated into many different types of recipes with excellent results. In summer cheese should be used to supplement every picnic meal. The versatility of the newer processed cheeses probably accounts for the increased use of cheese in cooking and for snacks. The latest news is that cheese has joined the ranks of powdered instant foods. Both cheddar and blue powdered cheeses will be available soon on the market and are recommended for use in au gratin potatoes, Welsh rarebit, soups and souffles, macaroni and cheese dinners and many other

dishes. To reconstitute the powdered cheese one has only to add water and stir!

Quebec is the second largest cheese producing province in Canada. The production in 1961 was 50,296,000 pounds. This was topped only by Ontario with 74,839,000 pounds. Since cheese is such an excellent food nutritionally and since the many forms now available on the Canadian market appeal to almost every taste, the domestic consumption of cheese should continue to increase on a per capita basis. This means that Quebec and Ontario, as Canada's two largest cheese producers, can expect an increased demand and can look to a bright future for the industry.

8 SPINNING L U R E S

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OVERWEIGHT...

A Serious Health Hazard

by Marion Zarkadas

Overnutrition is one of Canada's biggest health problems. It is caused by the consumption of excessive nutrients which are not immediately required by the body. The most common form results from an over intake of the fuel nutrients, namely fats, proteins, and carbohydrates, which causes overweight, since the food not required is converted into fat and stored in this form in the body.

Another form of over nutrition resulting from excessive amounts of vitamins and minerals, appears to be increasing in incidence, as the consumption of vitamin and mineral pills increases. Less is known of the dangers of the latter, but researchers are finding more and more evidence that excesses of some nutrients may be harmful.

Overweight people do have a health problem, since they are more susceptible to high blood pressure, diabetes, heart disease, gall bladder trouble and other conditions. It is important for them to know that overweight is an unnecessary evil, for if a person eats only the calories he requires daily his weight will remain constant.

Keeping calorie intake to this desired level, as many people know, is not as easy as it sounds. Many housewives have this problem. Often a woman who is preparing the family meals will sample as she cooks. This is important to ensure that the food is properly seasoned, but the temptation to eat a bit more than is needed is great. If she has teenage children, who frequently have voracious appetities, she gives them large servings and tends to serve herself generous portions as well. When the children are older she often finds more time for morning or afternoon social functions with friends, where refreshments (nearly always high in calories) are served, usually.

The importance of food in social entertaining is great and no one would wish to change the custom. But it does mean that a person who indulges in between-meal eating and who is concerned about her (or his) weight will have to cut down on calories at other meals in the day.

It is not only women who have weight problems. Men too, especially those in middle age, tend to put on excess weight. If a man is married to a good cook, the temptation to have a second helping is hard to resist. If his children are eating large servings his wife may serve him generous helpings too. Through habit he may continue to eat heavy meals, which, although necessary in his youth, are not required at his age. Because of decreased physical activity and some decrease in body metabolism his needs are usually considerably reduced.

Too little physical exercise is a contributing factor to overweight, not only among men, but among women, teen-agers and children as well. When a person is active, stored fat is burned by the body for energy. But the physical expenditure of the average Canadian family has been considerably reduced by household appliances, power tools, automobiles, and television.

A logical question at this point would be to ask if the energy needs of the body are reduced why are they not compensated for by a drop in appetite.

The answer is that the appetite in many cases does drop, but not to the point where it can be used as an accurate guide to food needs. Much research has been done to determine how the appetite is controlled, and as yet it is not completely understood. It does in some cases influence a person to eat when he has no real need for food, for example many people tend to eat between meals simply to break the monotony, or at the end of a heavy meal a person might refuse any further food because he is "full" but if a favorite delicacy is offered he often accepts and enjoys it.

Over eating if prolonged, will continue to add body weight. It should be remembered that this weight is usually added very slowly, in some cases as little as one or two pounds a year. After twenty years it will of course be very noticeable. The way this fat is deposited in men and women differs. In man surplus fat is deposited more in the visceral region, resulting in an abdominal paunch, whereas in women it tends to be distributed more evenly over the whole body. In either case the fat is disfiguring and the problem of exercising adequately is increased by the awkwardness of moving.

The most desirable approach to the problem of overweight is for a person to avoid becoming overweight. But if a person has put on extra pounds and wants to reduce he must remember that there is no quick and easy way to lose weight, which is safe, in spite of all the claims to the contrary of the people trying to promote fad diets and gimmicks for losing body weight in a few days or weeks.

The only sure and safe method is to reverse the process by which the weight was gained, that is to reduce the calories so that the stored body fat will gradually be used by the body for energy. The three cardinal rules for a person trying to lose weight are to 1) eat less sweet rich foods at regular meals; 2) eat little or nothing between meals, and 3) increase the amount of physical exercise daily.

Increased physical exercise should include walking a little further instead of driving the car, and deliberately choosing to do a task which involves physical exercise rather than delegating it to some other member of the family. This is a much more realistic and safe approach than to suddenly indulge in calesthenics of a vigorous type when a person is not used to such a regime.

Strength of mind and the determination to succeed in losing unnecessary poundage are the best approaches to the problem.



SPENDING FOOD DOLLARS WISELY

by Marion Zarkadas

The average Canadian family spends a relatively large portion of its yearly income for food. The smaller the income the higher the food expenditure in proportion to the whole. Yet very few families keep any sort of record of the amount spent. They may know approximately how much the groceries cost each week, but they rarely extend this calculation to learn how much this is per year. They might be staggered by the amount, since it may represent a quarter or more of the whole family budget. Still fewer persons check the relative nutritive value of the foods purchased. Yet this an important criterion for determining whether the money has been well spent for value received.

The number of persons in the family, their ages, sex and activities will determine how much food is required. Other factors may include the geographic location of the home, the social activities of the family, including the frequency and type of entertaining done in the home. A very important factor is the amount of food produced on the home-

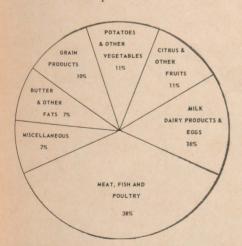


Fig. 1. Proportion of food money which should be spent on each food group to provide adequate nutrition.



site from a vegetable garden or poultry flock. The skill of the homemaker and the equipment available to preserve the excess food in season by canning or freezing affects the amount of food purchased. A working homemaker usually spends more of the money she earns outside the home to purchase prepared or semi-prepared foods. These are usually more costly but she may feel that the time saved justifies the expense. It is actually very difficult to compare the amount of money which one family needs for food with another family of the same size, when so many different circumstances apply in each cases

However, there are some guides to ensure that good nutrition value is obtained for the money spent on food. The Montreal Diet Dispensary, a Red Feather Agency, has developed a general formula which is helpful in judging whether each food dollar is spent wisely, from a nutritional standpoint. The circular chart, Figure I, shows the proportion of the total food costs for a family of four, in the moderate income bracket, for each of the major food groups. It is based on a family consisting of the father, mother, a girl of 12 and a boy of 16. In the city, the present estimated cost of feeding a family of this size is \$36.00 per week, and this would not include extras for entertaining. Slight adjustments in the percentage proportions of some food groups, particularly milk, would be needed for a family of adults as compared to a family with small children. But the chart is a good, general guide.

It is not difficult to determine whether food money is spent to the best advantage, nutritionally, using the guide. This may be done according to the following procedure:

I. For not less than two weeks and preferably a month or longer a record of all food purchased is kept on a larger sheet of paper, using each of the seven sections of the chart as a heading and entering the cost of each item purchased in the appropriate column, (see Figure 2). These are: 1) meat, fish and poultry; 2) milk, dairy products and eggs; 3) citrus and other fruits; 4) potatoes and other vegetables; 5) grain products (bread, cereals, floor, etc); 6) butter and other fats (include margarine, shortening, lard, mayonaise, French dressing, etc); 7) miscellaneous, such as tea, coffee, seasonings, sweets (sugar, syrups, jams), soft drinks, etc.

The non food purchases, such as soaps, cleaners, etc. should be separated from the food items before reaching the cash counter, so that they are all punched on the check at once, instead of being mixed in with the price of the food items, thus increasing the difficulty of identifying each article on the check.

II. At the end of the test period of two weeks or longer, expenditures are

(Continued on page 19)

Cottons That S-T-R-E-T-C-H

by M. M. Jenkins

The ingenuity of the scientist is at work to create a new personality for a fiber that has served mankind for thousands of years.

For thousands of years cotton has been a good and faithfull servant to mankind. Alexander the Great brought flowered robes of cotton to Greece from India. Joseph's famous coat was probably cotton, its borders and designs dyed by hand in many colours. Hundreds of years later, on a hot July day, the Roman mob poured into the arena to boo and huzzah the games dedicated to the sun god Apollo, sheltered under an enormous cotton awning. And long before Columbus dreamed his dream of a short-cut to India and China, the Incas of South America were weaving gorgeous cloaks of cotton intertwined with the soft brilliant feathers of tropical birds.

Cotton's many good qualities have allowed its use in every type of fabric from the sturdiest of denims to sheer crisp organdies and silk-soft batiste. Its beautly is unmarred by vigorous washing in hot water and heavy-duty soap suds. It dyes easily in fast radiant colours. It bleaches snowy white. It is pleasing to the touch. It is cool and comfortable in summer.

It has faults however, and these have become sharply apparent in our present age of the textile revolution, when the mircale fibres of science, behaving in their miraculous fashion, have become commonplace. Cottons are not naturally crease-resistant. Pleats are not permanent. Cotton varns weave close and smooth: the fabric lacks the bulkiness, the loftiness and fluffiness of woollens or the stretch yarns of the synthetics. In consequence cotton lacks warmth. A coat, for example, warm enough for winter, would be unbearably heavy. The ingenuity of the scientist is now at work to correct these faults - to make stretch cottons.

There is more than one way of attacking this problem and, because each method produces a cloth which behaves differently from the others, the consumer must know the behaviour of each if she is to choose wisely the particular one she needs.

The first and easiest method is illustrated by an advertisement which appeared a few days ago. It read:

STRETCH COTTON SWIM SUITS

Beautifully fitting versatile suits in fully lined cotton knit, elasticized for extra cling.

The stretch here lies in the knitting (knitted fabrics are always stretchy, whatever the fibre) and in the rubber elastic which was wound into the cotton yarns. Rubber is not long lasting. It will harden and break in sea water and in hot water laundering, but it does provide good stretch.

Cotton can be mixed with stretch nylon to make very attractive fabrics, if they are not ironed with a hot iron which would soften and fuse the nylon.

An ingenious twist method is being developed in one laboratory. Two small yarns are twisted tightly around each other, then saturated with chemicals which, when heated, form a resin. It is as if these chemicals were links. When they are heated, the links join together to form a chain which binds every fibre in a spiral. They cannot free themselves. The yarns are then re-twisted in the opposite direction, and in the struggle of the fibres to return to their original loop, they make small spring-like coils.

The little coils will straighten when pulled, time after time, then spring back into place. Eventually, however, they lose their snap but if they are dampened, they immediately re-coil. It is as simple as that.

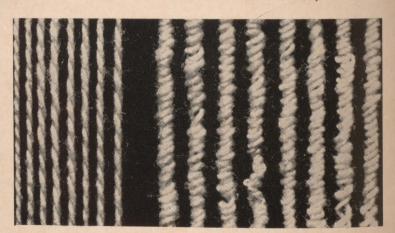
These are the yarns that will be used for comfortable stretchy socks and other knit goods, and for pyjamas and shorts. Slack mercerization is another method. Here the yarns are dipped in a solution of sodium hydroxide, the lye which once was boiled with fat for home-made soap. Before the treatment the cotton fibre looks like a microscopic ribbon twirled first to the right and then to the left. The sodium hydroxide enters this flattish ribbon and swells it almost to bursting. The twirls straighten and the fibre rounds out like a sausage. The chemical is then washed out, the fibre shrinks but still remains rounded. It might be called a hot-dog now.

Fibres coiled into a strand cannot swell thus unless they draw in on their length and so the yarn shrinks, as much as 30%. It will stretch as much when pulled. So will the cloth into which it is woven.

At present mercerize-stretch yarns can be woven only one way of the fabric but it makes diapers in which little babies can squirm comfortably; and sleepers which little feet can kick and which grow, at least for a while, as the baby grows. This is the cloth also which provides conforming bandages that wind around awkward injured joints, hold them firmly, but yield at the edges for the patient's comfort.

The mercerizing process is also used to set "permanent" pleats. If a piece of cotton is dampened and ironed, the fabric is smoothed and a sharply edged pleat can be set, but this pleat is soon lost. If the cotton is moistened with sodium hydroxide, however, and then ironed, the chemical puts a permanent crease in the fibres and so in the yarn and in the cloth. This work, of course must be done by machine under careful supervision, but cotton dresses with permanent peats seem almost too good to be true.

Two comments on the mercerizing process. The sodium hydroxide does not harm cotton. On the contrary, the fabric is stronger before than after. Secondly, "mercerize-stretch cotton" is quite different from the silky lustrous cloth that



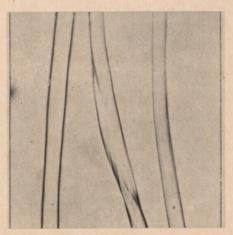
Ordinary cotton yarns and twist-stretch cotton yarns. From the Textile Research Journal, April, 1962.





is usually associated with the term mercerized. Mercerized cotton is held taut while the sodium hydroxide is being washed out. It cannot shrink but the ribbon fibres do round out to give it softness and sheen. "Mercerize-stretch" cotton is held slack to allow shrinkage.

The last method of making stretch cottons may carry a warning. The cotton is treated with chemicals so that it becomes thermoplastic, it softens under heat just as acetate does. Such details as permanent pleats are easy. They



Cotton — longitudinal view.

are set, then pressed with just enough heat to soften the edge. When the fabric cools again, if firms, and the sharp edge is permanent. But the cloth will not feel like cotton, nor behave like cotton. In short, it is no longer cotton, but a different material, with a different behaviour.

Stretch cottons are exciting, The work has only begun. We may yet be dressed from hat to hose in it, and sleep on stretch-cotton sheets under cozy stretch-cotton blankets.

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Compiled by T. Pickup of the Information and Research Service, Quebec Department of Agriculture and Colonization.

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This page supplied in the interests of the Family Farm by the Quebec Department of Agriculture and Colonization.

W. G. MacDOUGALL RETIRES



W. G. MACDOUGALL

"Year by year we grow older"... and every day brings us a little nearer to the one when we shall "retire"...

Mr. W. G. MacDougall, an agronome of great ability who has deserved well of his country, has not escaped this inevitable law.

On the 27th of April last, some two hundred and fifty persons met in the Sherbrooke Hotel in the city of that name renowned as "the Queen of the Eastern Townships", to pay well-deserved tribute to an agronome who has spent close to half a century in the service of our farmers. This splendid demonstration of affection and esteem, presided over by Senator C. B. Howard, was organized by a committee, of which Mr. Lionel Lafrance of the Lennox-ville Research Station was president and Mr. D. J. MacMillan, agronome for Compton County, secretary.

After having introduced the guests at the head table, Mr. MacMillan read a biographical note, in English and in French, concerning Mr. MacDougall. We give, here, a brief summary. "Mac", as he is known to his friends, is of Scottish descent. His grandfather lived in Argyllshire, where Dunollie castle the home of the clan MacDougall still stands. Mac's family came to Canada in 1928 and his father was born in genteuil, the MacDougalls moved soon

1833. Settling first near Lachute, Arafterwards to Ormstown where they bought land which they cleared and successfully farmed, and on which they raised Clydesdale horses and Ayrshire cattle. This farm is still in existence and is now operated with success by a young descendant of the MacDougall family. It is not difficult to understand why Mac, with this farming background, has always shown a great love for the soil and is so proud of his agricultural origins.

He himself was born at Ormstown in 1892. Following his earlier education in his native village, he attended Macdonald College from which he was graduated with the degree of Bachelor of Science in Agriculture. He has subsequently filled the following positions with distinction: Assistant-demonstrator (at Cowansville) for the Counties of Brome and Missisquoi (1914) and Demonstrator (at Lennoxville) for the County of Sherbrooke and the Township of Compton (1914-1916) on behalf of Macdonald College; County Agriculturist under the Quebec Department of Agriculture for Sherbrooke and Stanstead Counties (appointed in 1916); Regional Agronome for the Counties of Sherbrooke, Stanstead, Compton, and Richmond (1933-1947); once again Agronome for Sherbrooke County and Compton Township following the abolition of the post of Regional Agronome (from 1947 until the time of his retirement).

Mr. MacDougall has been connected with a great many agricultural activities. In 1921, he helped Mr. J. A. Ste-Marie to organize the first Calf Club in the Province, under the auspices of the federal and provincial Departments of Agriculture. Similar calf clubs have been organized each year since then and most of our present good herds have been built up by former members. Since then, he has been Secretary-treasurer of the Sherbrooke Agricultural Society, the Sherbrooke Horse Breeding Syndicate, the Lennoxville Farmers Club, the Sheep Breeders Associations of Sherbrooke and Stanstead, Holstein and Ayrshire Breeders Clubs of the St-Francis district, the Eastern

(Continued on page 16)





Elmside View Janie, a fine Holstein on the farm of Edwin Perie & Son, Bristol, Pontiac County. Mr. Pirie likes to see plenty of black on his cows, but the chief consideration is milk production.

THE NEED FOR A GOOD BREEDING PROGRAMME

Breeding programmes may vary considerably . . . but should always be focussed on the improvement of the quality of the herd and be combined with a sound feeding regime.

A well-managed dairy herd is a paying proposition; but it is an enterprise involving a number of hazards that call for constant attention on the part of the dairy farmer. Furthermore, the animals themselves represent a large capital investment from which most of the income of a mixed farm is usually derived.

Mr. Armand Ouellet of the Quebec Department of Agriculture and Colonization points out that the fate of so important a farming enterprise obviously cannot be left to chance. Whether the herd is just being started or whether it is a long-established array of outstanding purebreds, there must be a sound breeding programme which the owner must follow faithfully if he wants to reduce the uncertainties of his undertaking to a minimum.

The breeding programme may vary considerably from one farm to another but it should always be focussed on the improvement of the quality of the animals and be combined with a sound feeding regime. In addition, since it is impossible to work with sick animals, the health of the herd must be one of the owner's first considerations: hence the programme of herd management must include the established methods of testing for the control of contagious diseases and the purification of the herd from tuberculosis, brucellosis, and mastitis. Simple measures of cleanliness and hygiene in the barn must of course not be neglected, and the building should be well ventilated. It goes without saying that the actual breeding scheme should consistently be based on vigorous selection of the milking cows and the most discerning possible choice of sires.

The practised eye of a good dairy farmer who works with his animals every day of the year is surely of great help in the task of selection; but nothing can replace the weighing and testing of each cow's milk for obtaining the precise information which is required. The recording of milk yields should therefore be a permanent feature of the programme of every breeder who really wants to maintain the production of his herd at a high level. A well-kept herd register is likewise a source of exact information, and another essential aid to good breeding.

It should be remembered that the choice of sires plays a very large part in determining the future quality of the herd. This is therefore also an essential feature of a sound breeding programme and one which it never pays to be grudging about.

Good breeding must be backed by good and, at the same time, economical feeding. The cropping programme of the farm should provide the forage, adequate both in quantity and quality, and at least a large part of the concentrates needed to feed the herd. The items mentioned above will give a sufficient idea of the very varied problems encountered in the operation of a dairy herd to show the need for a sound programme of breeding and management. Any dairy farmer who does not yet have such a programme should consult his agronome who will help him to draw one up to suit his requirements.

This page supplied in the interests of the Family Farm by the Quebec Department of Agriculture and Colonization.



BEEF CATTLE IN QUEBEC

by

Hugh Peckham

There is a tremendous shortage of quality beef in Quebec — estimates expect consumption to be 10 times production by 1973.

There are three different aspects of a strictly beef-type enterprise:

- 1) Cow calf proposition purebred cattle;
- 2) Feeder production;
- 3) Steer production.

1—In an economical and efficient purebred beef-breeding herd that will provide enough annual revenue to support a family, a minimum of 40 cows is required. These must be healthy and produce a calf a year. The calves (male and female) will be sold as breeding stock, generally at 6 to 18 months. Prices range very widely and depend on the quality and pedigree of the animal in question. This type of enterprise calls for cattlemen interested in making constant selection to improve the breed of cattle with which they are working.

2 — Feeder production means the rearing of animals for sale at 6 to 15 months of age to cattlemen for fattening. Such an enterprise requires a herd of at least 50-60 cows. These cows may be grade animals or commercial purebreds. However, they should always be mated to a purebred bull. Prices for feeders follow the slaughter-cattle prices. The demand is usually greatest in early spring and early fall. Here in Quebec, in order to gradually accustom farmers to beef cattle, we urge owners of grade dairy herds who ship their

milk for manufacturing purposes, to breed at least half their cows to a beef bull. Now that beef bulls are in service at the St-Hyacinthe A.I. unit, cross-breeding has become an invaluable tool in the hands of the cattle producers of the Province. The calves resulting from this cross are larger, grow faster, and command a higher market price than a straight dairy calf. The male cross-bred calves may be castrated and sold as feeders, while the females may

be kept for the eventual development of a beef herd after 5 or 6 generations.

3 — Steer production involves a feedlot operation, with all cattle (feeders) being bought. In order to be economically advisable, at least 200-300 head would have to be marketed a year under these conditions. The feeders are usually purchased when weighing 700-750 and marketed at 1,000-1,500 lbs. It is in this weight-range that wellfinished cattle command top prices on the market and grade Choice and Good (Red and Blue brand beef). In Quebec there is a tremendous shortage of beef of this quality, amounting to about 250,000 head a year; this is part of a current deficit equivalent to about 575,000 head of all kinds of beef in Quebec. It is estimated that, in another 10 years, beef consumption in the Province of Quebec will equal 10 times the quantity of beef produced in Quebec in 1961. It must be understood that steer production is not confined to the large enterprise. Many purebred males unsuitable for reproduction, as well as young crossbred males, may be castrated and marketed as finished steers on any farm.

The market price for steers is usually favorable in late spring and early winter. Steers require 700-800 lbs of grain for every 100 lbs of gain. When on full feed, they will consume 16-18 lbs of grain per day and should gain between 2 and 2.5 lbs per day. Depending on market conditions, profit per steer may vary between \$20 to \$40.



A herd of shorthorns belonging to Mr. Alfred Jay & Sen of Litchfield.



Jean Carriere demonstrates the correct method of teaching a calf to drink milk from a pail.

Vast possibilities of veal and beef production

Within the next few years it will be necessary to double Quebec's veal production.

"It must be realized that there are limits to the growth of the dairy industry and that dairy farming is not the only answer to the agricultural problems of Quebec" said the Minister of Agriculture and Colonization, during a brief address to the annual meeting of the Purebred Livestock Breeders Society at Quebec on the 18th of April. Developing this theme, Mr. Courcy told the hundred or so prominent farmers in his audience that, within the next few years, it would be necessary to double the Province's present veal production and put into effect an efficient programme of beef raising. Markets for these products are available immediate-

This statement confirmed what had already been pointed out by Mr. E. Massé, of the Coopérative Fédérée, the guest speaker, who foresaw the possibility of using 120 million pounds of milk a year of our surplus (or the equivalent of 5 million pounds of butter) to add an average of twenty pounds to the weight of each of the 600,000 veal calves that the farmers of Quebec

send to market each year. Mr. Massé also advised Quebec farmers to intensify their production of beef, which now meets only one quarter of the Province's requirements.

At the dinner which was arranged in connection with the meeting, Mr. S. J. Chagnon, assistant Deputy-Minister of Agriculture at Ottawa, maintaining the same theme, stressed the need for mixed farming to safeguard our family farms. According to this experienced agronome, the possibilities for improvement in livestock farming in Quebec are still very great, but the farmer must pay heed to the quality of his products and the cost of their production.

In his message to the breeders, Mr. Pierre Labrecque, editor of the Quebec Animal Productions Division declared that artificial insemination, by making the services of excellent bulls available for a modest fee, would favour economical transition from milk to beef production. The Artificial Insemination Centre at St-Hyacinthe is taking the necessary steps in this connection.

LIVESTOCK ON QUEBEC FARMS

The Agricultural Division of the Quebec Bureau of Statistics issues estimates of the number of cattle, sheep, and horses on farms in the Province of Quebec on December 1st 1962: for the sake of comparison figures for December 1961 are also given.

Cattle and calves: on December 1st 1962, the number of cattle on farms in the Province was 1,741,000 head, an increase of 0.9% over the estimated total of 1,725,000 on the same date in 1961. The number of milk cows increased to 1,009,000 as compared with 996,000 on December 1st 1961 — an increase of 1.3%. Calves also followed the rising trend: there were 341,000 on December 1st 1962, as against 318,000 in 1961 (an increase of 7.2%).

Sheep and lambs: estimated at 95,000 head on December 1st 1962, the number of sheep and lambs shows a decrease of 10.4% from the 106,000 head reported for the corresponding period in 1961.

Horses: the decline in the number of horses continues. There are now 88,000 horses, about 6.4% below the total of 94,000 in December 1961.

This page supplied in the interests of the Family Farm by the Quebec Department of Agriculture and Colonization.



THE CHOICE OF A GOOD RAM

The more care is taken to choose a good ram from among the best animals procurable, and the more valuable his contribution to the herd, the more and better meat the lambs will produce. If the yield of wool is also an important consideration, a good ram will likewise help to improve the quality of the fleece of his offspring.

In the opinion of those at the Quebec Department of Agriculture and Colonization who are occupied with livestock, the lack of concern shown by too many farmers about the choice of a sire for their flock is much more to blame for the decline of this side of our agriculture than are the ravages caused by bears and stray dogs, or even by internal parasites.

The laws of heredity apply no less to sheep than they do to cattle, pigs, and horses, and as much care should be taken in the selection of a ram as of a bull, a boar, or a stallion. Mr.

Rousseau points out that, whether the ram is a good one or a poor one, his influence on the quality of the lambs is equal to that of all the females combined. A good purebred ram will improve a flock of sheep rapidly and at no great cost. On the farm of a rearer of "half-bred" sheep, the improvement will be even more apparent and rewarding.

Every fall, good raisers of purebred sheep are visited by graders from the Canadian and Provincial Governments. Lambs and rams are classified or reclassified as "CL" or "BR", with a view to the identification of breeding animals which are considered suitable for improving flocks and the removal of indifferent or undesirable animals from service. This policy of classification is designed for the protection of all those who raise sheep: it is in their interest to make use of it.

The cost of a classified ram is not high, in view of the grant paid by the Quebec Department of Agriculture and Colonization. Hence there is no need to make do with an unclassified or "grade" animal. Sheep are generally considered to be easy to raise: they are not just a necessary nuisance. The farmer who pays serious attention to the three basic principles of livestock management — breeding, feeding, and tending — will maintain his flock on an economically sound and more profitable basis.

The market for lamb will stay at a profitable level in so far as it is supplied with a choice product. One thing is certain: we shall never produce good market lambs if the parents do not possess the desired qualities.

W. G. MacDougall (Continued)

Townships Beef Cattle Club, the Sherbrooke Ploughman's Association, the Lennoxville Short Course Committee and many other organizations.

Mr. MacDougall has also organized school fairs in the district (Ayer's Cliff held its 47th school fair last September). He has been director of the Eastern Townships Agricultural Association since 1928 (and president in 1952 and 1953) and director of the Agricultural Societies of Stanstead and Compton. In a word, he has been very active in all the agricultural and para-agricultural associations of the region, and also in connection with the Sherbrooke Winter Fair, of which he is a founding member, with short courses in agriculture, Monday radio broadcasts, and the Farm Forum movement. Mr. Mac-Dougall is very devoted to his Church, to which he has rendered faithful and responsible service for over twenty years. In addition, the Red Cross Society, the Boy Scouts and the Y.M.C.A. have all benefitted from his devotion. There is no sphere of activity, whether religious, agricultural, or social, in which he has not played an honourable role.

In 1919, he married Miss Agnes Dick of Sherbrooke who has presented him with three children, two sons and a daughter, who are now: Dr. Daniel MacDougall, B.A. (Bishop's University), M.Sc. and Ph.D. (McGill), assistantdirector of research at Chem. Agro. Co. Kansas; Dr. George MacDougall, B.Sc. (Bishop's), Dr. (D.S.) (McGill), Lieutenant Colonel in the Canadian Militia, stationed at Esquimalt, B.C.; and Margaret (Mrs. O. E. Tauboe) B.Sc. (H. Ec. McGill), M.Sc. (Michigan State) now living in Akron, Ohio, where her husband has an executive position in the research division of the Goodyear Rubber Company. She has three sons.

All those who spoke at the dinner laid emphasis on Mr. MacDougall's many solid qualities of heart and mind,

AGRICULTURAL INSTITUTE ANNUAL MEETING

The members of the Quebec City section of this Canada-wide association of professional agriculturalists held their annual general meeting at the "Château Bonne Entente" on the 6th day of May. Mr. Robert Samson, Eastern Canadian representative of the Meat Packers Council of Canada, presided at the discussions and the dinner, About thirty members of the A.I.C. from Quebec and the surrounding region took part in the proceedings:

The Quebec section (or branch) of the A.I.C. now has 50 members and the directors are aiming at a membership of at least 75 in twelve months' time. This seems to be a reasonable objective in view of the fact that French-speaking agronomes — whether they are "in the field", on the staff of a University, working in laboratories or carrying out investigations on experimental farms and research stations. employed in business or engaged in politics, or otherwise using their talents — are all interested not only in the agricultural problems of Quebec but in those of Canada. They need to join their colleagues of the other Canadian provinces to study and analyse the present condition of Canadian agriculture as a whole, contribute to its improvement and participate in its progress.

in terms such as these: "a great worker", "limitless devotion", "a model family man", "a distinguished citizen", "an able agronome with an admirable broadness of outlook in his dealings with colleagues and farmers, regardless of race or creed". In addition to Senator Howard and Mr. MacMillan, the following also paid tribute to Mr. Mac-Dougall: The Reverend Ritchie Bell; Paul Sylvestre director of the Lennoxville Experimental Station; J. E. Audet, head of the Provincial agricultural extension service; Professor Emil Lods of Macdonald College; Jean-Marie Petit (on behalf of the French-speaking farmers), and M. G. Bennett (for the English-speaking farmers). Almost without exception, the speakers used both languages in paying their tribute, and they included Mrs. MacMillan, who was presented with a bouquet of roses by a little girl, in their praise. Many messages of congratulations and good wishes from people unable to be present were read. The agricultural associations of the region presented "Mac' with a handsome monetary tribute and a magnificent painting of a rural, autumn scene.

Our best wishes to Mr. and Mrs. MacDougall for a happy retirement!

J. Bruno Potvin





The Better Impulse

NEWS AND VIEWS OF THE WOMEN'S INSTITUTES OF QUEBEC



THE PRESIDENT OF THE ASSOCIATED COUNTRY WOMEN OF THE WORLD



Mevrouw Geerda van Beekhoff van Selms

Mevrouw Geerda van Beekhoff van Selms, World President of ACWW, is Dutch, and was educated in the Netherlands, Switzerland and England. On leaving school she went to train as a nurse, but this career was cut short when she met and married her husband and went to live in Betuwe, that lovely land between the Rhine and the Maas, where her husband's family had owned land for generations.

Soon after her marriage, she joined the Dutch Country Women's organization, and started several new branches in her district.

In 1939 the Germans invaded Holland and for the next six years her life was both difficult and dangerous. Many refugees found shelter in her home and during the battle of Arnhem she had twenty people to care for, in a house that was only a mile from the front line. She is proud of the fact that after nine months of danger, discomfort and very little food they all parted good friends.

After the war the Country Women's organization started again and Geerda became President of her local branch. She was always interested in the international side of the work, and at the 1947 Conference in Amsterdam she was one of the group that arranged tours for our delegates. She attended our Conferences in Copenhagen and Toronto and visited the United States as a guest of the Country Women's Council. In 1954 she was elected National President of her own Society, the Nederlandse Bond van Plattelandsvrouwen.

In 1957 she went to the Colombo Conference and was one of the leaders of the Seminar in Kandy, going on, after the Conference, to visit our Society in Pakistan. Half her expenses on this tour were paid by the Ministry of Agriculture of the Netherlands, a tribute to the standing of her organization and herself in her own country. In 1959, at Edinburgh, she was elected World President of ACWW.

Her first assignment was to attend a meeting of the Non-Governmental Organizations in Rome, to discuss plans for the FAO Freedom from Hunger Campaign. Here she was appointed to sit on a small advisory Committee—the only woman on it. In 1960 she toured the United States and in 1961 she did a similar tour of Africa, contacting our Societies, meeting a great variety of members and making many friends. She was, of course, at the ACWW Conference in Melbourne last October.

Geerda van Beekhoff is a very busy woman. She lives in a lovely old farm house in Kerk-Avezaath and makes a very happy home for her husband and her son. She is on the board of a Dutch radio corporation planning rural programmes, she does much work for the Country Women's organization and attends ACWW meetings in London as often as she can. She is a wise, charming and warmhearted woman, much loved by all who know her.

Mrs. van Beekhoff is to attend the World Food Congress in Washington this month (June). She has been invited by Dr. Sen, Director-General of FAO, to present a paper on "The role of women, youth, teachers and other groups of people involved" at the Congress.

Following the Congress, Mrs. van Beekhoff will tour Canada visiting the member Societies of ACWW. She will be in Quebec province June 25th to 29th and will be present at the QWI Convention at Macdonald College, going from there to Quebec City to visit the Cercle des Fermières.

The QWI Convention will be held this year June 24-28. The order of the program will be different from former years. As Mrs. van Beekhoff cannot be with us on the Thursday which is the usual day for members

COUNTY PROJECTS

Chat-Huntingdon: Howick WI with the cooperation of the Council, Cercles de Fermières, and Home & School Assn. sponsored a very successful bicycle safety test May 26th (the months of April or May are recommended for this). There were 58 entrants. Two police officers gave the tests and also a talk on safety. A bilingual staff was required as both English and French schools were involved. The prizes included money and bicycle equipment. A local dairy donated milk.

This project was most interesting and satisfactory. The police officers were well pleased and recommended another be held. Mrs. H. Kerr, Conv. of Education and Mrs. Jas. Crawford, Co. Conv. of publicity, planned this worthwhile event.

Chat-Huntingdon: The Lions Club of Ormstown sponsored a Music Festival in May and prizes, a \$25 scholarship and a \$5 one, were given by the Chat-Huntingdon Co. WI's. A number of WI members took part in the different sections, besides helping to direct and train. The adjudicators were from Montreal and were impressed by the quality of performance and the talent displayed.

Stanstead: In 1927 at a Stanstead Co. WI meeting it was suggested that a rest room for mothers with children be set up for the three days of the County Fair. This was first outside the fair grounds and proved very popular, but as there was difficulty with passes to leave the grounds, the WI proposed building a room on the end of the County Agricultural Building. \$175 was raised for the project, each WI member contributing \$1.00. The Agricultural Society and the County Council came forward with financial help.

other than delegates to come for the day, this year Wednesday will be Visitors Day.

The Executive meeting will be as usual Monday and the Board Meetings Tuesday. The delegates will need to be registered by evening on Tuesday as the usual Wednesday afternoon program will be moved to Wednesday morning.

We are expecting an especially good handicraft exhibit to show our distinguished visitor who is very interested in handicrafts.

ANNUAL BOARD MEETING FEDERATED WOMEN'S INSTITUTE OF CANADA



Mrs. James Haggerty, Napanee, Ont., president of the Federated Women's Institutes of Canada (seated), is an admirer of the FWIC crest, presented to the national office by the Manitoba Women's Institute. With Mrs. Haggerty are three provincial W.I. presidents; Mrs. H. M. Ellard (1), Quebec, Mrs. Leonard Hrivers, Ontario and Mrs. L. C. Crane, Newfoundland.

The Board met in the Chateau Laurier with representatives from all the ten provinces.

Among motions arising from the minutes were (a) that the registration fee at National Conventions be increased to \$20 (b) that each province furnish handicrafts or other articles for sale at the National Convention in Nova Scotia to help defray expenses of convention (c) that the per capita fee for FWIC be 25ϕ (d) that FWIC purchase 2 rolls of films (slides) for pictures of the Hoodless Homestead and the same of the Peace Garden.

The Unesco Gift Coupon Plan #400 for adult extension work in the West Indies is now closed, the amount being raised \$7,150.

The question of acquiring Squire's Hall where the meeting took place to form the first Institute at Stoney Creek, is awaiting word of the date of sale of this property.

Finance (Disclosures) Act — Senator Croll had met with representatives of interested organizations to discuss hearings before the Senate Committee in support of this Bill. FWIC was joining with the Consumers Association of Canada in presenting a Brief. Parliament was dissolved before it could be presented. Bill will be again coming up for approval at the next session of Parliament and support is still asked.

The National Federation of Women's

Institutes of England and Wales has given £5,000 to be used to develop projects already in progress as part of the Freedom from Hunger Campaign. Mrs. Haggerty explained that the Share-A-Loaf coin cards can be used for the Lady Aberdeen Scholarship Fund. They can be obtained from the National Office, Ottawa, and can be turned in to any branch of the Canadian Imperial Bank of Commerce.

Mrs. Rand's report on ACWW suggested several important points to make ACWW better known to our members: Pennies for Friendship should be a part of every meeting; that every branch should have at least one subscription to The Countrywoman; advertise ACWW tea towels (there is a new upto-date one); ACWW Triennal competitions should be more widely undertaken.

The next Triennal Conference will be in Dublin in 1965. Mrs. Haggerty has been named tour conductor for Canadian delegates.

All provinces are looking forward to Mrs. van Beekhoff's visit and it has now been found possible for her to include the northern branches in her itinerary as she wished.

Peace Garden — It was reported that a parking lot has been cleared and graded close to the FWIC areas as it was found necessary to enlarge the space. A commemoration program was

held July 14, 1962 marking the 30th anniversary of the unveiling of the cairn.

Members were reminded that 2 of the 3 years for the next Tweedsmuir Competitions had passed. They are also urged to enter the Cairine Wilson Citizenship Competition.

Hoodless Homestead — Restoration is to be completed by Centenary Year. Landscaping was done by the Horticultural Dept. of the Ontario Agricultural College. Since the Township purchased the adjoining lot for them, they now have more room to expand. The acquisition of picnic tables is being considered. The house is now pretty well furnished with period furniture and decoration. Washrooms have been installed at the rear of the Homestead for the use of visitors, of whom there were 3,000 registered in the last year. There are now 119 volumes of "Canadiana" in the library. It is suggested that postcards of the home be available for sale to visitors.

Northern WI's — a study kit has been assembled and is available to the provinces. More branches have been organized in the Mackenzie District. Upon word of formal sanction from Unesco for submitted descriptive text, the Unesco Gift Coupon Plan #367 for assistance in our work in the north will be set in motion. The Northern Lights Bulletin, a paper giving news of and from the northern branches, is printed at the National Office and is available to anyone interested for 50¢ a year.

A PIONEERING VENTURE

The Quebec Women's Institutes are sponsoring, with the assistance of the Dept. of Indian Affairs, a course in Homemaking for Indian girls and young women. This will be held June 10-14 at Macdonald College where the girls will live in residence.

Mrs. C. Zarkadas and Miss C. Hollyer of the staff of the School of Household Science are generously offering their time to teach the course, which this year will concentrate on practical cooking and meal planning, canning and budgeting.

Six of the candidates are coming from the Reserves of Notre Dame du Nord and Winneway where WI branches have been established for some time. The other six are from the Reserves of Oka, Caughnawaga and Odanak.

Two members of the QWI will live in residence with the students to assist in planning 'after class' activities and to act generally as house mothers. It is hoped that this venture will be such a success that it will become a permanent annual event.



Assoc. Country Women of the World 10th Triennial Conference

The Quebec delegate, along with representatives of all other Provinces across Canada except Prince Edward Island, arrived in Melbourne, Australia to attend the 10th Triennial Conference of the Associated Country Women of the World. There were twelve hundred delegates present, many of them from the newly emerging countries and this number swelled upwards to 4,000 on occasion as women arrived from all parts of Australia.

Flags of thirty-four nations were borne in by the young standard bearers and with the flags of the U.N. and A.C.W.W., formed the background for the platform on opening day. Forty-six truckloads of flowers had been brought in from Australia, New Zealand and Tasmania for decoration and were an impressive sight. His Excellency, Sir Dallas Brooks, Governor General of Australia, officially opened the 10 day Conference and in his speech urged the delegates to show deep interest and patience with our young people who will inherit the future. Woman, he stated, sets the standard for home and community life, in selflessness, truth and decency. These standards under the pressures of modern day living are being threatened on all sides and he urged all present to recapture the spirit of the Crusaders and endeavour to pursue and uphold these high standards of integrity.

Greetings and welcome were expressed by the Premier of Australia, Mr. Bolté and the Lord Mayor of Melbourne and the Prime Ministers of many countries sent greetings.

Professor Zelman Cowan, Dean of Faculty, Melbourne University, gave the opening address. He spoke of the closeness of our neighbours in a shrinking world, and of the many problems facing the United Nations. He urged tolerance amongst all countries and a greater respect for Human Rights. Concepts in Europe were changing and a great need for the abolition of war and prosperity through World Trade was apparent.

The Theme of the Conference was the Country Women's place in a Changing World and Mrs. van Beekhoff, the World President of A.C.W.W. asked the women to open their minds to the Fresh Air Change of the World while enjoying the open hearts, open tables and open discussions. With the diversity of background and customs we were challenged to discover each other.

Four topics, Food, Friendship, Learning and Leisure formed the basis for discussions which all revolved around the theme. Miss Jean McNaughton in the pre-discussion group address, startled the gathering with the plain fact that is was impossible to feed all the hungry peoples of the world from surplus of other Countries. If all the grain stored in the U.S. for the past 10 years were doled out to the starving Asians. it would only give 200 calories a day for three years. Technical advice and assistance for underdeveloped countries must be undertaken promptly and she urged the direction of the efforts of A.C.W.W. towards providing the necessary training for workers who would advise on nutrition and household improvement.

Friendship:

This topic was discussed amongst individuals, communities and countries and it was decided that friendship amongst peoples led to friendship amongst communities and then on to friendship amongst nations. It is the most necessary ingredient to peace and . can bring the other results, food and learning with it. The greatest danger in the world is not the Hydrogen Bomb but hunger and ignorance.

FOOD DOLLARS (Continued)

totalled in each column. The total of all seven columns is added together. The percentage of the total amount spent for any one of the seven groups can be calculated and compared with the percentage shown in the circular chart. If it is close to the percentage shown good nutritional value is being obtained for each food dollar spent. If it is badly out of proprotion, the family food habits and/or the shopping habits need to be checked.

For farm families or families with good gardens, it is important to include all foods consumed and to enter these at store prices, otherwise the cash cost of the extra items (group 1) may be out of proportion to the value of the basic foods. (Groups 1 - 6)

The findings of such a study are often startling. Miscellaneous items representing the least nutritionally valuable foods may prove to be much in excess of the 7 per cent recommended. The greater the difference between the percentage recommended on the graph and the money spent foods in the seven different groups, the less likely it is that the food dollar is being well spent, nutritionally. As in any such survey, the longer the record is kept, the more accurate will be the results. This is particularly true in cases where staple items are bought in large quantities at one time. Although keeping a food record is timeconsuming, the high cost of feeding the family and the vital importance of food for health warrants more than casual, impulse buying for the family food.

CLASSIFIEDS

WANTED

SALES AGENTS NEEDED, Part-time or full time, to sell Sunmaster Guaranteed Five Year Light Bulbs to homes, stores, offices, factories. Sales come easy - profits come fast. Up to \$10 and more in a single hour. Write for full details to: Sunmaster of Canada Limited, Dept. M.J.8 52nd floor, 145 Yonge Street, Toronto, Ontario.

FARM FOR SALE

Ninety-six acres level farm land one mile from town, 37 miles from Windsor, adjoining intersection #401 and #2, one mile from #98. Four large barns, ten room brick veneer house, oil heated. Seeded by good tenant; 44 acres corn, 28 fall wheat, 12 soy bean, 8 barley. \$36,000. Apply box 54, Tillbury, Ontario.

SERVICES

COMPLETE PRINTING FACILI-TIES — Labels, tags, tickets, etc. Whatever your printing needs Rod & Gun Press can handle them for you. Take the worry out of this portion of your operation's requirements — ALSO THE HIGH COST. Inquire today on our prices. If it can be printed we can do it. Rod & Gun Press, 451 Beaconsfield Blvd., Beaconsfield, P.Q. 695-5715, Area Code: 514.

WRITE FOR FREE LISTINGS on business opportunities, ranches, farms, homes, orchards and lakeshore properties. Okanagan Realty Ltd., 551 Bernard Ave., Kelowna, B.C.



A. C. LAMB & SONS Liverpool, N.Y.

THE MONTH WITH THE W.I.

Most County Meetings are over by now, and reports have come in of the excellent talks given the Provincial Executive. The usual donations have been given, and the emphasis was on Agriculture this month, with many sales of slips and bulbs. It is good to note that some branches are buying seeds to continue that important project — the School Fair. A record number of 20 Counties reported this month.

ABITIBI: MALARTIC had a successful Tile Course, and displayed 45 articles that had been made. An apron sale was held, proceeds will be used to buy chairs.

ARGENTEUIL: ARUNDEL have completed two quilts which will be sold at a bazaar. A "Blind" Auction was held, and their roll call "Tell a joke or pay 10¢" resulted in many laughs. BROWNSBURG had a Fashion Show, the garments were modelled by the girls who had made them at a Sewing Course conducted by Mrs. Wells. Mr. Pare, County Agronomist, spoke on the importance of milk distribution in the school. DALESVILLE-LOUISA saw coloured slides, on the various uses of plywood by a representative of the B.C. Plywood Association. FRONTIER had a sale of slips and bulbs and enjoyed slides on a trip to B.C. JERUSALEM-BETHANY had a discussion on growing flowers, and their roll call was an exchange of flowers and shrubs. LACHUTE met at the home of Mrs. Gordon Davidson, who gave a talk on china and silver, and who displayed her beautiful antiques. LAKEFIELD discussed Fair work, and exchanged slips for roll call. MILLE ISLE gave a donation to the High School for book prizes. An article was read on the Ponderosia Lemon Plant. MORIN HEIGHTS entertained the Grandmothers of the community. Their appropriate roll call was "A Remedy my Grandmother Used". PIONEER subscribed to the Federated News and enjoyed a trip to the Simpson-Sears store. Mr. Thibodeau, local agronomist, spoke on the value of vegetables, and recommended dusts and sprays to use. UPPER-LACHUTE-EAST END had a cooking contest and a reading from the C.A.C. bulletin, conducted by their convener of Home Economics, Mrs. Sydney Berry. Mrs. Simon Wilson, County convener of Home Economics was guest speaker.

BROME: ABERCODN had an Agriculture Quiz, and their roll call was Hints on the Care of House Plants. AUSTIN held a Silent Auction to benefit Welfare and Health Funds. KNOWLTON'S LANDING are raising Talent money and SOUTH BOLTON made forty hats at a millinery course. SUTTON brought in salad recipes.

CHATEAUGUAY-HUNTINGDON: AUBREY-RIVER-FIELD heard about everyday life in Cuba, in a talk given by Mrs. Spinks. A donation was made towards Music Festival prizes. DEWITTVILLE had a sale of nearly new children's clothes, and a talk by Mrs. Angus McNaughton on Good Grooming, DUNDEE had a discussion on Home Environment and its effects on the family, and HEMMING-FORD had a plant sale. HOWICK had a quilting and a pot-luck dinner. They report a most successful Music Festival. HUNTINGDON had a talk on "Travelling Vegetables" and found out that only 5 vegetables are native to North America. A loan of \$100 was made to a High School student. ORMSTOWN learned the ins and outs of Banking, in a talk given by Mr. J. Taylor, Bank Manager. COMPTON: BROOKBURY entertained two families who are leaving the community. CANTERBURY had a Paper Drive, and presented a gift to a member going to Scotland.



PUBLIC SPEAKING WINNERS

Winners of the public speaking finals held in Hemmingford High School; Andrew Sancton, Marielle Green and Dee Glover (Ormstown), and Gavin Farmer (Hemmingford).

BURY had an important speaker — the Mayor — who talked about the financial status of the town, and the different problems of the Council. COOKSHIRE enjoyed readings presented by conveners, and Mrs. W. Coates, Prov. convener of Agriculture spoke on 4H Clubs and ARDA. Miss M. Fraser, delegate to the U.N. Pilgrimage of Youth, gave her winning speech on the U.N. EAST ANGUS made several donations and had a Paper Drive. EAST CLIFTON held an Art Class, and a nurse from the Health Clinic showed films and spoke on cancer, diabetes etc. SCOTSTOWN's speaker was the School Nurse, and her subject was "Care of the Eyes" — they also had a Paper Drive.

GASPE: GASPE have prepared two complete layettes. Their roll call was — "Count the Pennies in your Purse" HALDIMAND had a Scrambled Word Contest. WAKE-HAM gave a donation to buy soup for hot lunches at the school. Seventy-seven pairs of socks and four sweaters were sent to the USC. 40 prs. of the socks were made by a member, Mrs. Edward Patterson, who is a patient in the Ross Sanitarium. YORK welcomed four new members and held a Chinesse Auction in aid of branch funds.

GATINEAU: AYLMER EAST had a demonstration on making drapes, curtains and slip-covers given by the Rispelle Fabric Centre. EARDLEY had a sale of home cooking, and a baby chick contest was won by Mrs. S. Robinson. LOWER EARDLEY collected used clothing and sent it to a Mental Institution. A ready by Mrs. Duncan Nesbitt — "Is it wasteful to Educate a Girl" was the basis of a good discussion. RUPERT had a quiz on Medicine and Hygiene — their roll call was "Name a Home-made remedy you have found beneficial" WAKEFIELD had a talk by a school-teacher, Mrs. Kilby Crowder, on "Education Through the Ages". Members collected for the Red Cross. WRIGHT discussed "Women's Clubs, What's Their Future" and an Occupational Quiz was won by Mrs. S. Ogilvie and Mrs. D. Stevenson.

JACQUES CARTIER: St. ANNE DE BELLEVUE held a card party to raise funds. A joint County meeting was held with Vaudreuil, with Mrs. Ossington as guest.

WEATHER WISE

The climate which is of interest to the farmer is that in which plants and animals grow. This is in the first few feet above the ground. Therefore, the measurements required in agricultural meteorology differ from the measurements for weather forecasts discussed last month.

Temperatures at the ground surface are more extreme than those of the air above. During the day the ground is warmer and during the night it is colder. For this reason, it is possible to get frost on the ground even when the air temperature is as much as 42°F. Ground temperatures are measured by thermometers lying on grass. Soil temperatures are also measured for agricultural meteorology. Plants require a certain temperature before they germinate, and roots require a certain temperature for best growth. For example, corn requires a higher temperature than oats.

Rainfall, both amount and intensity, must be measured for agricultural meteorology. Rainfall over an area is not uniform, especially when it comes from summer storms. Rainfall measured at a weather station twenty miles away may be much different. So it must be measured on the farm where the information is required.

Humidity of the air must be measured since it affects plant growth and well-being of animals. Other measurements such as wind, hours of sunshine, evaporation are also usually made at an agricultural weather station.

For Your Information

Now Print Directly On Food

A revolutionary printing process has been developed in the U.S. for printing brand names or other messages right on fresh fruit, vegetables, meats, and even eggs.

The process involves the use of dry edible ink particles which are printed on the item by electrostatic means without pressure being applied to the product. Successful tests have been made on surfaces of such foods as fresh meat, soft fruit, and eggs.

Teen Girls Rate Meats

"Seventeen" magazine asked 200 teenage girls in urban and rural areas the kind of meat they liked best. Steak was the big favorite, followed by chicken, hamburger and turkey. When asked which ones they were most confident of preparing, steak still won and hamburger and chicken switched to place and show. However, the girls brought in a dark horse when they listed preferences for party foods. Hamburger were the leaders, followed by hot dogs and then chicken.

Farm Forum News 'N' Views

THE COMING SEASON

Plans are underway for the coming Farm Forum season. On May 27th, representatives of Quebec Forums met at Macdonald College. Topic suggestions for next year's broadcasts were discussed. Mr. Larry Gosnell of CBC, Toronto, and Mr. Roger Schwass, National Farm Radio Forum, Toronto, were present. Similar meetings have been held with representatives of all provinces so that topics can be chosen which interest most Forums. The selection of topics will be completed at the National Farm Forum meeting in Saskatchewan on June 3, 4 and 5. Messrs. W. S. Laberee, M. Waldron and G. Driver will represent Quebec at this meeting.

We are considering holding a week-end leadership work shop this fall for leaders of Forums in Quebec.

On May 18th, Brome County held a Rally in the Knowlton High School for all Forums. It was well attended with representatives from all groups. Mr. Bob Stone from the University of Vermont spoke on Rural Development.

Compton, Sherbrooke and Stanstead Forums held a Farm Forum Rally at the Lennoxville Experimental Farm on Monday, May 20th.

Some of us recently had the opportunity to hear Mr. Gonthier from Public and Industrial Relations Ltd., Montreal, speak on the farmers' responsibility concerning accidents on public roadways. Every individual should certainly be aware of his responsibilities in this respect. We feel that something further should be done in the Forums to make people aware of this new Highway Safety Act.

On May 15th, the Directors of Quebec Farm Radio Forum met at Macdonald College. Thirteen were present. Discussions covered membership drives, finances, and automobile insurance. A resolution was presented regarding the amount of publicity being given to fallout levels in milk and on farm crops.

Dairy Support Program 1963-64

The Honourable Harry Hays, Minister of Agriculture, has announced Government action to help consumers and at the same time bring production and consumption of dairy products into better balance.

The Government's measures are designed in part to move more milk into the production of cheddar cheese. An effective support level of 64 cents per pound will be provided for producees who ship cream and manufacturing milk to make butter.

The Government will purchase, at an appropriate price, certain quantities of skim milk powder, instead of continuing the supplementary payment that has, since 1959, been made to shippers of manufacturing milk.

In making these announcements, Mr. Hays stressed that, while this dairy program would be effective for the dairy year starting May 1, the Government is actively considering further long-term measures. It will press forwarddiscussions with the provinces and the industry, with the aim of providing assistance to school milk programs. And it intends to take further constructive steps to correct the imbalance of supply and demand.

Dealing with the details of present policy, Mr. Hays said that, as an incentive to cheddar cheese production, the Government will maintain the former support level of 32½ cents per pound and will increase, from 25 cents to 30 cents per hundredweight, the special payment on manufacturing milk used for the production of cheddar cheese. Producers selling to the fluid milk market will not be eligible for this payment. Except on milk used for cheddar cheese production, the supplementary payment will be discontinued.

The Agricultural Stabilization Board will buy and sell 40-score creamery butter at 52 cents per pound, basis Montreal and Toronto. The Board will authorize manufacturers of creamery butter to make compensatory payments of 14½ cents per pound of butterfat used for the production of creamery butter to producers other than those who participate in the fluid milk market. The Board will reimburse the plants for these payments.

The net effect of the program will be to provide an effective support level of 64 cents per pound for producers who ship cream and manufacturing milk for the production of butter.

OUTSIDE...

In weed control some of our gardeners have raised the question of post-emergence chemical weed killers which are selective in their action. This, you can well understand, is a tall order; especially where many different vegetable plants are growing in the garden. However, it so happens that there still may be available a weed killer which may be used in the garden to control weeds, but not in the way you would expect it to work. It is necessary that you first clean up the garden of all weeds and then spray it thoroughly with this weedicide known as Crag weed killer. This, according to directions, will act on the new weeds as the weed seeds germinate.

In addition to the weed pests, there are the insects and diseases. If you notice any plants which seem to be cut off at the surface of the ground, it will likely be due to cutworms. If this damage is recent, you may be able to find the so-called worms, or caterpillars, if you dig with your finger around the cut plants. This worm, or caterpillar, will be short, about an inch long and rolled up like a snail shell or shrimp and will be inactive. It will be a greasy-grey in colour and full of food. Destroy it immediately. This nefarious character feeds at night and hides just under the surface of the soil during the day. The remedy is to poison, as soon as possible, the remaining worms which you cannot see and which are hiding just under the surface of the soil. Purchase a can of ant and grub killer powder and dust it freely around your plants, especially the lettuce, peas, beans, and sweet corn. Put paper or tin collars around the tomato plants and have these collars project an inch above the ground.

Shortly after the radishes and summer turnips are through the ground they should be given protection against another type of insect known as flea beetles. Flea beetles are small, shiny, black jumping insects (beetles) which eat many tiny holes in both the cotyledon and true leaves of the plants. Later on they may attack the leaves of other vegetables, such as

beans, potatoes, and tomatoes.

Dusting the leaves of these plants with Derris Dust is an efficient control. This "dust" may also be used for the green cabbage worms which infest cabbage, cauliflower and broccoli and which follow soon after you see the white and yellow butterflies fluttering around these plants. In applying this dust, put it into a cheesecloth bag and shake on the leaves early in the morning before the dew dries off the foliage. Do not breathe in the dust as it may prove irritating to the lungs. Perhaps we should repeat our previous warning about maggots infecting the early brassicas, such radishes, turnips, cabbage, cauliflower and broccoli. If the plants, or seeds, have not already been planted, apply ant and grub killer to the surface of the soil in the row and work it in before planting. If seeding has already taken place, use the 20% Aldrin emulsion; spray it on the surface of the soil and work it in as you cultivate. In every case follow very carefully the directions on the package.

Next month

A special issue on Rural Development

Exclusive articles . . .

EDUCATION

FARM MECHANIZATION

AGRICULTURAL ENGINEERING

DON'T MISS IT!

WHAT'S NEW IN FILMS?

"LIFE IN THE WOODLOT"

16mm sound colour 17 mins. Produced by National Film Board.

A surprising peek into the hidden world of the underbrush — a world you would never suspect on a stroll through the woods. There is violence as well as tranquility; harmony as well as conflict.

The film brings into focus a pyramid of life in which the lower orders sustain and support the higher orders. You will capture a view of nature that will enrich your walks in the woods. You will obtain an understanding of a natural law that demands respect, and a warning that the complete destruction of one form of life could topple the pyramid and man who crowns the peak.

May be borrowed from the Extension Film Library, Macdonald College, by any responsible group or individual. Service charge \$1.00 — transportation charges extra.

THIRTEENTH ANNUAL SPRING BEEF SALE

The Thirteenth Annual Spring sale was held in Sherbrooke on May 2nd. Dr. Louis G. Johnston, outgoing President of the Quebec Beef Cattle Association, spoke briefly at the opening. Mr. Pierre Labrecque, Director of the Livestock Branch, Quebec Department of Agriculture and Colonization urged breeders to bring top quality cattle to these shows and sales.

Forty-two lots were offered for sale and brought an average of \$445.71.

The top selling Hereford bull consigned by J. P. Fleury of Montreal sold to Ferme David and Robin of St. Elizabeth for \$700. This was the grand Champion Hereford bull. The top selling Hereford female consigned by J.C. Routledge, Georgeville was purchased by Mr. G. Labrie, St-Luc, Matane County, for \$480.

In the Shorthorns, the top selling bull consigned by Tutira Farm, Arundel, sold to Mr. Harry Tremblay representing the Canada Department of Agriculture for \$500.

These cattle were sold to buyers from all over the province. Only one animal went to Ontario. It was purchased by Mr. Murray Fritz of Guelph, Ontario. The top prices were not as high as in other years, but on the other hand the lowest prices were not as low as usual.

